

Subpart J—Security

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AUTHORITY: 49 U.S.C. 5103, 60102, 60103, 60104, 60108, 60109, 60110, 60113, 60118; and 49 CFR 1.53.

SOURCE: 45 FR 9203, Feb. 11, 1980, unless otherwise noted.

Subpart A—General**§ 193.2001 Scope of part.**

(a) This part prescribes safety standards for LNG facilities used in the transportation of gas by pipeline that is subject to the pipeline safety laws (49 U.S.C. 60101 *et seq.*) and Part 192 of this chapter.

(b) This part does not apply to:

(1) LNG facilities used by ultimate consumers of LNG or natural gas.

(2) LNG facilities used in the course of natural gas treatment or hydrocarbon extraction which do not store LNG.

(3) In the case of a marine cargo transfer system and associated facilities, any matter other than siting pertaining to the system or facilities between the marine vessel and the last manifold (or in the absence of a manifold, the last valve) located immediately before a storage tank.

(4) Any LNG facility located in navigable waters (as defined in Section 3(8) of the Federal Power Act (16 U.S.C. 796(8))).

[45 FR 9203, Feb. 11, 1980, as amended by Amdt. 193-1, 45 FR 57418, Aug. 28, 1980; Amdt. 193-10, 61 FR 18517, Apr. 26, 1996]

§ 193.2003 [Reserved]**§ 193.2005 Applicability.**

(a) Regulations in this part governing siting, design, installation, or construction of LNG facilities (including material incorporated by reference in these regulations) do not apply to LNG facilities in existence or under construction when the regulations go into effect.

(b) If an existing LNG facility (or facility under construction before March 31, 2000 is replaced, relocated or significantly altered after March 31, 2000, the facility must comply with the applicable requirements of this part governing, siting, design, installation, and construction, except that:

(1) The siting requirements apply only to LNG storage tanks that are significantly altered by increasing the original storage capacity or relocated, and

(2) To the extent compliance with the design, installation, and construction requirements would make the replaced, relocated, or altered facility incompatible with the other facilities or would otherwise be impractical, the replaced, relocated, or significantly altered facility may be designed, installed, or constructed in accordance with the original specifications for the facility, or in another manner subject to the approval of the Administrator.

[Amdt. 193-17, 65 FR 10958, Mar. 1, 2000, as amended by Amdt. 193-18, 69 FR 11336, Mar. 10, 2004]

§ 193.2007 Definitions.

As used in this part:

Administrator means the Administrator, Research and Special Programs Administration or his or her delegate.

Ambient vaporizer means a vaporizer which derives heat from naturally occurring heat sources, such as the atmosphere, sea water, surface waters, or geothermal waters.

Cargo transfer system means a component, or system of components functioning as a unit, used exclusively for transferring hazardous fluids in bulk between a tank car, tank truck, or marine vessel and a storage tank.

Component means any part, or system of parts functioning as a unit, including, but not limited to, piping, processing equipment, containers, control devices, impounding systems, lighting, security devices, fire control equipment, and communication equipment, whose integrity or reliability is necessary to maintain safety in controlling, processing, or containing a hazardous fluid.

Container means a component other than piping that contains a hazardous fluid.

Control system means a component, or system of components functioning as a unit, including control valves and sensing, warning, relief, shutdown, and other control devices, which is activated either manually or automatically to establish or maintain the performance of another component.

Controllable emergency means an emergency where reasonable and prudent action can prevent harm to people or property.

Design pressure means the pressure used in the design of components for the purpose of determining the minimum permissible thickness or physical characteristics of its various parts. When applicable, static head shall be included in the design pressure to determine the thickness of any specific part.

Determine means make an appropriate investigation using scientific methods, reach a decision based on sound engineering judgment, and be able to demonstrate the basis of the decision.

Dike means the perimeter of an impounding space forming a barrier to prevent liquid from flowing in an unintended direction.

Emergency means a deviation from normal operation, a structural failure, or severe environmental conditions that probably would cause harm to people or property.

Exclusion zone means an area surrounding an LNG facility in which an operator or government agency legally controls all activities in accordance with § 193.2057 and § 193.2059 for as long as the facility is in operation.

Fail-safe means a design feature which will maintain or result in a safe condition in the event of malfunction or failure of a power supply, component, or control device.

g means the standard acceleration of gravity of 9.806 meters per second² (32.17 feet per second²).

Gas, except when designated as inert, means natural gas, other flammable gas, or gas which is toxic or corrosive.

Hazardous fluid means gas or hazardous liquid.

Hazardous liquid means LNG or a liquid that is flammable or toxic.

Heated vaporizer means a vaporizer which derives heat from other than naturally occurring heat sources.

Impounding space means a volume of space formed by dikes and floors which is designed to confine a spill of hazardous liquid.

Impounding system includes an impounding space, including dikes and floors for conducting the flow of spilled hazardous liquids to an impounding space.

Liquefied natural gas or *LNG* means natural gas or synthetic gas having methane (CH₄) as its major constituent which has been changed to a liquid.

LNG facility means a pipeline facility that is used for liquefying natural gas or synthetic gas or transferring, storing, or vaporizing liquefied natural gas.

LNG plant means an LNG facility or system of LNG facilities functioning as a unit.

m³ means a volumetric unit which is one cubic metre, 6.2898 barrels, 35.3147 ft.³, or 264.1720 U.S. gallons, each volume being considered as equal to the other.

Maximum allowable working pressure means the maximum gage pressure permissible at the top of the equipment, containers or pressure vessels while operating at design temperature.

Normal operation means functioning within ranges of pressure, temperature, flow, or other operating criteria required by this part.

Operator means a person who owns or operates an LNG facility.

Person means any individual, firm, joint venture, partnership, corporation, association, state, municipality, cooperative association, or joint stock association and includes any trustee, receiver, assignee, or personal representative thereof.

Pipeline facility means new and existing piping, rights-of-way, and any equipment, facility, or building used in the transportation of gas or in the treatment of gas during the course of transportation.

Piping means pipe, tubing, hoses, fittings, valves, pumps, connections, safety devices or related components for containing the flow of hazardous fluids.

Storage tank means a container for storing a hazardous fluid.

Transfer piping means a system of permanent and temporary piping used for transferring hazardous fluids between any of the following: Liquefaction process facilities, storage tanks, vaporizers, compressors, cargo transfer systems, and facilities other than pipeline facilities.

Transfer system includes transfer piping and cargo transfer system.

Vaporization means an addition of thermal energy changing a liquid to a vapor or gaseous state.

Vaporizer means a heat transfer facility designed to introduce thermal energy in a controlled manner for changing a liquid to a vapor or gaseous state.

Waterfront LNG plant means an LNG plant with docks, wharves, piers, or other structures in, on, or immediately adjacent to the navigable waters of the United States or Puerto Rico and any shore area immediately adjacent to those waters to which vessels may be secured and at which LNG cargo operations may be conducted.

[45 FR 9203, Feb. 11, 1980, as amended by Amdt. 193-1, 45 FR 57418, Aug. 28, 1980; Amdt. 193-2, 45 FR 70404, Oct. 23, 1980; Amdt. 193-10, 61 FR 18517, Apr. 26, 1996; Amdt. 193-17, 65 FR 10958, Mar. 1, 2000; 68 FR 11749, Mar. 12, 2003]

§ 193.2009 Rules of regulatory construction.

(a) As used in this part:

(1) *Includes* means including but not limited to;

(2) *May* means is permitted to or is authorized to;

(3) *May not* means is not permitted to or is not authorized to; and

(4) *Shall* or *must* is used in the mandatory and imperative sense.

(b) In this part:

(1) Words importing the singular include the plural; and

(2) Words importing the plural include the singular.

§ 193.2011 Reporting.

Leaks and spills of LNG must be reported in accordance with the requirements of part 191 of this chapter.

§ 193.2013 Incorporation by reference.

(a) This section lists materials all or part of which are incorporated by reference in the corresponding sections noted. Applicable editions are in paren-

theses following the titles of the materials. Earlier editions listed in previous editions of this part may be used for components manufactured, designed, or installed in accordance with those earlier editions at the time they were listed, unless otherwise provided in this part.¹ The Director of the Federal Register has approved these incorporations by reference under 5 U.S.C. 552(a) and 1 CFR part 51. The materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the FEDERAL REGISTER. All materials are available for inspection at the Office of Pipeline Safety, Research and Special Programs Administration, 400 Seventh Street, SW., Washington, DC, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(b) The material listed below is available for purchase from the American Gas Association, 400 N. Capitol St., NW., Washington, DC 20001 or from ILI Infodisk, Inc., 610 Winters Avenue, Paramus, New Jersey 07652:

(1) "Purging Principles and Practices" (1975), incorporation by reference approved for §§ 193.2513, 193.2517, and 193.2615.

(c) The material listed below is available for purchase from the American Society of Civil Engineers (ASCE), Parallel Centre, 1801 Alexander Bell Drive, Reston, VA 20191-4400:

(1) ASCE 7-95 "Minimum Design Loads for Buildings and Other Structures" (1995), incorporation by reference approved for § 193.2067.

(d) The material listed below is available for purchase from the American Society of Mechanical Engineers (ASME), Three Park Ave., New York, NY 10016-5990:

(1) ASME Boiler and Pressure Vessel Code, Section VIII, Divisions 1 and 2 (1998), incorporation by reference approved for § 193.2321.

¹The user must refer to an appropriate previous edition of 49 CFR for a listing of the earlier editions.